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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,010	12/31/2003	Claudio Taglienti	06365/03501	9330

23460 7590 07/09/2008

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EXAMINER	
SHIN, KYUNG H	

ART UNIT	PAPER NUMBER
2143	

MAIL DATE	DELIVERY MODE
07/09/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/750,010	TAGLIENTI ET AL.	
	Examiner	Art Unit	
	KYUNG H. SHIN	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14, 16-26, 29-40, 42- 49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14, 16-26, 29-40, 42- 49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This application was filed on **12-31-2003**.

2. Claims **1-14, 16-26, 29-40, 42- 49** are pending. Claims **1, 16, 26, 40, 45** have been amended. Claims **15, 27, 28, 41** have been cancelled. Claims **1, 16, 26, 40, 45** are independent.

Response to Arguments

3. Applicant's arguments filed 3/10/2008 have been fully considered but they are moot based on new grounds of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims **1, 4 - 8, 10, 11, 26, 31 - 35, 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Xanthos et al.** (US Patent No. **6, 928,280**) in view of **Zappala et al.** (US PGPUB No. **20020127993**) and further in view of **McLaughlin, Jr.** (US Patent No. **7,290,056**).

Regarding Claim 1, Xanthos discloses a method for measuring latency between a first device and a second device during a user data session, the first and second devices

communicating in accordance with a communications specification, the method comprising:

a) transmitting, during a session between the first and second devices, a message from the second device to the first device, the message being in accordance with the communications specification; (Xanthos col 4, ll 3-6: command message (GET command) transmitted between two devices, latency measurement; col 3, ll 60-63: multiple remote devices (first, second device))

b) during the session receiving a response message from the first device, the response message provided by the communications specification; (Xanthos col 4, ll 3-6: received information based on command message)

c) computing an elapsed time from transmission of the message to receipt of the response message to determine the latency; (Xanthos col 4, ll 6-8: determination, amount of time to receive response from source)

Xanthos discloses the storage of latency measurement information and its placement in a database. (Xanthos col 4, ll 48-53: storage of latency information) Xanthos does not explicitly disclose recording the latency parameter in a data record.

However, Zappala discloses:

d) recording the latency in a latency parameter in a data record. (Zappala para 018, ll 1-10: performance management system; para 032, ll 1-4; para 033, ll 7-10; paragraph 0037, ll 2-6: performance parameters stored within call data records

(data records))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for the storage of performance information in data records as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11: *" … By the time the adjustments are made, the network may require different adjustments. In addition, the results of the adjustment are difficult to determine quickly. … "*; para 005, ll 9-12: *" … Because this method does not enable finer adjustments to be made, or even to be detected, this method is not helpful in solving network performance problems that are not easily seen or are geographically limited. … "*)

Xanthos does not explicitly disclose latency measurements during a user data session. However, McLaughlin discloses: (a) transmitting, during a user data session between the first and second devices, a message; (b) during the user data session receiving a response message; and (c) computing an elapsed time. (McLaughlin col 13, ll 20-25: time required for a coordinator (first device) to send a message and a participant (second device) to acknowledge receipt of the message (latency over an active user session))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for transmitting a message during a user session, receiving a response during user session, and computing an elapsed time as taught by McLaughlin. One of ordinary

skill in the art would have been motivated to employ the teachings of McLaughlin in order for a mechanism that manages quantum values such as timeout and network latency in a manner that both reduce the number of transactions aborted and transaction overhead. (McLaughlin col 13, ll 4-6: " *... There is therefore a need for a mechanism for managing quantum values in a manner that both reduces the number of transactions aborted and transaction overhead. ...* ")

Regarding Claims 4, 31, Xanthos discloses a method, system in accordance with claims 1, 26, further comprising: transmitting the data containing the latency parameter to an application server. (Xanthos col 17, ll 17-24; col 21, ll 13-24: back end processor (application server), post processing of collected data) Xanthos does not explicitly disclose whereby the data record. However, Zappala discloses wherein the data record. (Zappala para 018, ll 1-10: performance management system; para 032, ll 1-4; para 033, ll 7-10; paragraph 0037, ll 2-6: performance parameters stored within call data records (data records))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for the storage of performance information in data records as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11; para 005, ll 9-12)

Regarding Claims 5, 32, Xanthos discloses a method, system in accordance with claims 1, 26, wherein the data is provided by the communications specification, the method further comprising: adding the latency parameter to the data. (Xanthos col 4, ll 3-6; col 4, ll 48-53: storage of latency information in database) Xanthos does not explicitly disclose whereby the data record. However, Zappala discloses wherein the data record. (Zappala para 018, ll 1-10: performance management system; para 032, ll 1-4; para 033, ll 7-10; paragraph 0037, ll 2-6: performance parameters stored within call data records (data records))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for the storage of performance information in data records as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11; para 005, ll 9-12)

Regarding Claims 6, 33, Xanthos discloses a method, system in accordance with claims 1, 26, wherein the first device and the second device are adapted to communicate wirelessly using the communications specification. (Xanthos col 4, ll 11-14: wireless communications between remote units)

Regarding Claims 7, 34, Xanthos discloses a method, system in accordance with claims 1, 26, wherein the first device and the second device are adapted to

communicate via a wire-line portion of a wireless network using the communications specification. (Xanthos col 4, ll 9-11: communications network wired and wireless portions)

Regarding Claims 8, 35, Xanthos discloses a method, system in accordance with claims 1, 26, wherein the first device is a mobile station and the second device is a mobility agent. (Xanthos col 3, ll 60-63: multiple remote mobile units (mobile station, mobility agents)

Regarding Claims 10, 37, Xanthos discloses a method, system in accordance with claims 1, 26, wherein the message and the response message are link establishment protocol messages. (Xanthos col 4, ll 37-38: control link type messages processed)

Regarding Claim 11, Xanthos discloses a method in accordance with claim 1, wherein the step of transmitting is performed after the communication session has been established. (Xanthos col 4, ll 3-6: communication session active (established) for latency test (GET data command))

Regarding Claim 26, Xanthos discloses a system for measuring latency during a user session carried out in accordance with a communications specification comprising: a first device; and a second device adapted for communicating with the first device in accordance with the communications specification and for transmitting a message to the

first device during the session, receiving a response message from the first device during the session, computing an elapsed time from transmission of the message to receipt of the response message to determine the latency, and recording the latency in a latency parameter in data; wherein the message and the response message are provided by the communications specification. (Xanthos col 3, ll 60-63: multiple remote devices (first, second); col 4, ll 3-8: latency determination (send message, receive response); col 4, ll 48-53: storing (recording) latency information)

Xanthos does not explicitly disclose whereby the data record. However, Zappala discloses wherein the data record. (Zappala para 018, ll 1-10: performance management system; para 032, ll 1-4; para 033, ll 7-10; paragraph 0037, ll 2-6: performance parameters stored within call data records (data records))

It would have been obvious to one of ordinary skill in the art to modify Xanthos as taught by Zappala to enable the capability for the storage of performance information in data records. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11; para 005, ll 9-12)

Xanthos does not explicitly disclose latency measurements during a user data session. However, McLaughlin discloses: (a) transmitting a message to the first device during the user data session; (b) receiving a response message from the first device during the user data session; and (c) computing an elapsed time. (McLaughlin col 13, ll 20-25:

time required for a coordinator (first device) to send a message and a participant (second device) to acknowledge receipt of the message (latency over an active user session)

It would have been obvious to one of ordinary skill in the art to modify Xanthos-Zappala for transmitting a message during a user session, receiving a response during a user session, and computing an elapsed time as taught by McLaughlin. One of ordinary skill in the art would have been motivated to employ the teachings of McLaughlin in order for a mechanism that manages quantum values such as timeout and network latency in a manner that both reduce the number of transactions aborted and transaction overhead. (McLaughlin col 13, ll 4-6)

6. Claims **16 - 20, 22, 29, 30, 40, 42, 43, 45, 48** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Xanthos-McLaughlin** and further in view of **Dyck et al.** (US PGPUB No. **20040260831**).

Regarding Claim 16, Xanthos discloses a method, performed by a packet data serving node, for measuring latency during a user data session, comprising:

d) computing a wireless access latency based on the first start time and the first stop time. (Xanthos col 4, ll 25-31: packet data communications (packet data server node); col 4, ll 3-8: compute latency, compute difference (latency, amount of time required between start and stop times))

Xanthos does not explicitly disclose start, stop times, and echo message

transmissions.

However, Dyck discloses:

a) storing a first start time; (Dyck para 013, ll 6-9: start time for message)

b) transmitting, to a mobile station during the session, a Link Control Protocol Echo message; (Dyck para 052, ll 1-5; para 056, ll 1-8: echo request/response messages)

c) receiving a Link Control Protocol Echo Response message during the session from the mobile station; (Dyck para 052, ll 1-5; para 056, ll 1-8: echo request/response messages)

d) storing a first stop time; (Dyck para 013, ll 6-9: stop time utilized) and

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby the message and the response message are control plane (not normal traffic data) messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7: *" …It is apparent that a need exists for an improved system and method for timing request retransmissions that effect re-registration while minimizing unnecessary transmissions. There is also a need for a system and method to enhance mobile device communications, minimize network loads, and optimize network traffic levels by means of optimized Mobile IP re-registration. … "*)

Xanthos does not explicitly disclose latency measurements during a user data session. However, McLaughlin discloses: (b) transmitting during the user data session a message; and c) receiving a message during the user data session from the mobile station. (McLaughlin col 13, ll 20-25: time required for a coordinator (first device) to send a message and a participant (second device) to acknowledge receipt of the message (latency over an active user session))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for transmitting a message during a user session and receiving a response during user session as taught by McLaughlin. One of ordinary skill in the art would have been motivated to employ the teachings of McLaughlin in order for a mechanism that manages quantum values such as timeout and network latency in a manner that both reduce the number of transactions aborted and transaction overhead. (McLaughlin col 13, ll 4-6)

Regarding Claim 17, Xanthos discloses a method in accordance with claim 16, wherein the step of transmitting is performed during a communication session between the packet data serving node and the mobile station. (Xanthos col 4, ll 25-31: packet data communications; col 3, ll 60-63; col 8, ll 39-41: remote units (mobile stations))

Regarding Claim 18, Xanthos discloses a method in accordance with claim 1, wherein the step of transmitting is performed. (Xanthos col 4, ll 3-6: transmission of request/response message) Xanthos does not explicitly disclose whereby the

expiration of a timer. However, Dyck discloses wherein the expiration of a timer. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration timer)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby transmission upon expiration of a timer as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 19, Xanthos discloses a method in accordance with claim 12. (Xanthos col 3, ll 40-52: performance management system) Xanthos does not explicitly disclose whereby the timer is not provided by the communications specification, the method further comprising: implementing the timer in the second device, the timer configured to expire during the communication session. However, Dyck discloses wherein the timer is not provided by the communications specification, the method further comprising: implementing the timer in the second device, the timer configured to expire during the communication session. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration timer)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby expiration of timer as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 20, Xanthos discloses a method in accordance with claim 16, wherein the packet data serving node and the mobile station are configured to communicate in accordance with a communications specification. (Xanthos col 3, ll 60-63; col 8, ll 39-41: mobile stations; col 4, ll 20-23: multiple communications protocols (specifications) utilized (GSM, CDMA, TDMA))

Regarding Claim 22, Xanthos discloses a method in accordance with claim 16, further comprising:

d) computing an internet access latency based on the second start time and the second stop time. (Xanthos col 4, ll 25-31: packet data communications (packet data server node); col 4, ll 3-8: compute latency, compute difference (latency, amount of time required between start and stop times))

Xanthos does not explicitly disclose start, stop times, and registration message transmissions.

However, Dyck discloses:

a) storing a second start time; (Dyck para 013, ll 6-9: start time for message)

b) transmitting, to a home agent, a Mobile IP Registration Request message; (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent; para 023, ll 1-11; para 052, ll 1-5; para 064, ll 1-13: registration request/response)

c) receiving a Mobile IP Registration Reply message from the home agent; (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent; para 023, ll 1-11; para 052, ll 1-5;

para 064, ll 1-13: registration request/response)

c) storing a second stop time; (Dyck para 013, ll 6-9: start time for message) and

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby start, stop times, registration message capability as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 29, Xanthos discloses a system in accordance with claim 26. (Xanthos col 3, ll 40-52: performance measurement system; col 4, ll 37-38: operational control link processing) Xanthos does not explicitly discloses whereby the message and the response message are control plane messages. However, Dyck discloses wherein the message and the response message are control plane messages. (Dyck para 014, ll 5-10: control (registration type) messages, not normal data traffic)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby the message and the response message are control plane (not normal traffic data) messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 30, Xanthos discloses a system in accordance with claim 26.

(Xanthos col 3, ll 40-52: performance management system) Xanthos does not explicitly disclose whereby the message and the response message do not affect a session data usage of a user. However, Dyck disclose wherein the message and the response message do not affect a session data usage of the first device. (Dyck para 052, ll 1-5; para 023, ll 1-11; para 064, ll 1-13: control (registration type) messages, not normal data traffic)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby the message and the response message are control plane (not normal traffic data) messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 40, Xanthos discloses a system for measuring wireless access latency during a user data session, the system comprising:
a mobile station; and a packet data serving node for wirelessly communicating with the mobile station, the packet data serving node adapted for transmitting a link control protocol echo message to the mobile station during the session, receiving a link control protocol response message from the mobile station during the session, and computing an elapsed time from transmission of the link control protocol message to receipt of the link control protocol response message to determine the wireless access latency. (Xanthos col 3, ll 60-63: multiple remote devices (mobile stations); col 4, ll 37-38: control

link type communications; col 4, ll 25-31: packet data node; col 4, ll 3-8: latency determination (send message, receive response); col 4, ll 48-53: storing (recording) latency information) Xanthos does not explicitly disclose whereby echo message to the mobile station, receiving a echo response message. However, Dyck discloses wherein echo message to the mobile station, receiving an echo response message. (Dyck para 052, ll 1-5; para 056, ll 1-8: echo request/response message utilized)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby echo message capability as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Xanthos does not explicitly disclose latency measurements during a user data session. However, McLaughlin discloses: (a) transmitting a message during the user data session; (b) receiving a response message during the user data session; and (c) computing an elapsed time. (McLaughlin col 13, ll 20-25: time required for a coordinator (first device) to send a message and a participant (second device) to acknowledge receipt of the message (latency over an active user session))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for transmitting a message during a user session, receiving a response during user session, and computing an elapsed time as taught by McLaughlin. One of ordinary skill in the art would have been motivated to employ the teachings of McLaughlin in order for

a mechanism that manages quantum values such as timeout and network latency in a manner that both reduce the number of transactions aborted and transaction overhead. (McLaughlin col 13, ll 4-6)

Regarding Claim 42, Xanthos discloses a system in accordance with claims 40, wherein the step of transmitting is performed. (Xanthos col 4, ll 3-6: transmission of request/response message) Xanthos does not explicitly disclose whereby the expiration of a timer. However, Dyck discloses wherein the expiration of a timer. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration timer)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby transmission upon expiration of a timer as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 43, Xanthos discloses a system in accordance with claim 40, wherein the link control protocol message and the link control protocol response message are provided by a communications specification. (Xanthos col 4, ll 37-38: link control messages) Xanthos does not explicitly disclose whereby echo message and echo response message are provided by a communications specification. However, Dyck discloses wherein echo message and echo response message are provided by a communications specification (Dyck para 052, ll 1-5; para 056, ll 1-8: echo message(s)

utilized)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby echo message request/response processing as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 45, Xanthos discloses a system for measuring internet access latency comprising: and computing an elapsed time from transmission of the mobile internet protocol request message to receipt of the mobile internet protocol reply message to determine the internet access latency. (Xanthos col 4, ll 4-8: determine latency (elapsed time from transmission), message sent and response received) Xanthos does not explicitly disclose whereby a home agent, and registration request/reply message to home agent. However, Dyck discloses wherein a home agent; and a packet data serving node for communicating with the home agent, the packet data serving node adapted for transmitting a mobile internet protocol registration request message to the home agent during the session, receiving a mobile internet protocol registration reply message from the home agent during the session. (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent; para 052, ll 1-5; para 023, ll 1-11; para 064, ll 1-13: registration message processing)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby a home agent, registration message capability as taught by Dyck. One of

ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Xanthos does not explicitly disclose latency measurements during a user data session. However, McLaughlin discloses: (a) transmitting a message during the user data session; and (b) receiving a message during the user data session. (McLaughlin col 13, ll 20-25: time required for a coordinator (first device) to send a message and a participant (second device) to acknowledge receipt of the message (latency over an active user session)

It would have been obvious to one of ordinary skill in the art to modify Xanthos for transmitting a message during a user session and receiving a response during a user session as taught by McLaughlin. One of ordinary skill in the art would have been motivated to employ the teachings of McLaughlin in order for a mechanism that manages quantum values such as timeout and network latency in a manner that both reduce the number of transactions aborted and transaction overhead. (McLaughlin col 13, ll 4-6)

Regarding Claim 48, Xanthos discloses a system in accordance with claim 45, wherein the mobile Internet protocol request message and the mobile Internet protocol reply message are provided by a communications specification. (Xanthos col 4, ll 3-8: message send and response processing) However, Dyck disclose wherein the mobile Internet protocol registration request message and the mobile Internet protocol

registration reply message are provided by a communications specification. (Dyck para 052, ll 1-5; para 023, ll 1-11; para 064, ll 1-13: registration request/reply messages processed)

It would have been obvious to one of ordinary skill in the art to modify Xanthos as taught by Dyck to enable the capability whereby registration request and registration reply message. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

7. Claims **2, 3, 9, 12 - 14, 21, 23 - 25, 36, 38, 39, 44, 46, 47, 49** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Xanthos-Zappala-McLaughlin** and further in view of **Dyck**.

Regarding Claim 2, Xanthos discloses a method in accordance with claim 1. (Xanthos col 3, ll 40-52: performance measurement system; col 4, ll 37-38: operational control link processing) Xanthos does not explicitly discloses whereby the message and the response message are control plane messages. However, Dyck discloses wherein the message and the response message are control plane messages. (Dyck para 014, ll 5-10: control (registration type) messages, not normal data traffic)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby the message and the response message are control plane (not normal traffic

data) messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 3, Xanthos discloses a method in accordance with claim 1. (Xanthos col 3, ll 40-52: performance management system) Xanthos does not explicitly disclose whereby the message and the response message do not affect a session data usage of a user. However, Dyck disclose wherein the message and the response message do not affect a session data usage of a user. (Dyck para 052, ll 1-5; para 023, ll 1-11; para 064, ll 1-13: control (registration type) messages, not normal data traffic)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby the message and the response message are control plane (not normal traffic data) messages as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 9, Xanthos discloses a method in accordance with claim 1, wherein the first device is a remote unit and the second device is a remote unit (mobility agent). (Xanthos col 3, ll 60-63: multiple remote units; col 4, ll 3-6: message communications between remote units) Xanthos does not explicitly disclose whereby a home agent.

However, disclose wherein a home agent. (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent, mobile unit (mobility agent) communications)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby a home agent as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 12, Xanthos discloses a method in accordance with claim 1, wherein the step of transmitting is performed. (Xanthos col 4, ll 3-6: transmission of request/response message) Xanthos does not explicitly disclose whereby the expiration of a timer. However, Dyck discloses wherein the expiration of a timer. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration timer)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby transmission upon expiration of a timer as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 13, Xanthos discloses a method in accordance with claim 12, wherein the timer is provided by the communications specification. (Xanthos col 4, ll 3-6: transmission of request/response message) Xanthos does not explicitly disclose

whereby the timer is provided by the communications specification. However, Dyck discloses wherein the timer is provided by the communications specification. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration time part of registration process (communications specification))

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby timer is provided by the communications specification as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claims 14, Xanthos discloses a method in accordance with claim 12. (Xanthos col 3, ll 40-52: performance management system) Xanthos does not explicitly disclose whereby the timer is not provided by the communications specification, the method further comprising: implementing the timer in the second device, the timer configured to expire during the communication session. However, Dyck discloses wherein the timer is not provided by the communications specification, the method further comprising: implementing the timer in the second device, the timer configured to expire during the communication session. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration timer)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby expiration of timer as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability

to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claims 21, 25, Xanthos discloses a method in accordance with claims 20, 22, wherein the communications specification provides for a data record, the method further comprising:

b) recording the wireless access latency in the wireless access latency parameter. (Xanthos col 4, ll 48-53: storage of latency access parameter)

Xanthos discloses wherein adding a wireless access latency parameter to the data. (Xanthos col 4, ll 11-14: wireless communications; col 4, ll 3-6; col 4, ll 48-53: storage of latency within data) Xanthos does not explicitly disclose whereby the data record.

However, Zappala discloses:

a) adding a parameter to the data record; (Zappala para 018, ll 1-10: performance management system; para 032, ll 1-4; para 033, ll 7-10; paragraph 0037, ll 2-6: performance parameters stored within call data records (data records))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for the storage of performance information in data records as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11; para 005, ll 9-12)

Regarding Claim 23, Xanthos discloses a method in accordance with claim 22, wherein the further comprises the Internet access latency for a processing time. (Xanthos col 3, ll 40-52: performance management system) However, Zappala discloses wherein adjusting the Internet access latency for a processing time. (Zappala para 018, ll 1-10; performance measurement system; para 025, ll 1-11; para 034, ll 8-15: adjust performance parameters (adjust latency))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for the storage of performance information in data records as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11; para 005, ll 9-12)

Xanthos-Zappala does not explicitly disclose whereby the Internet access latency for a processing time associated with the home agent. However, Dyck discloses wherein further comprises the Internet access latency for a processing time associated with the home agent. (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent)

It would have been obvious to one of ordinary skill in the art to modify Xanthos-Zappala whereby the Internet access latency for a processing time associated with the home agent as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck

para 012, ll 1-7)

Regarding Claim 24, Xanthos discloses a method in accordance with claim 22, wherein the computing the Internet access latency further comprises the internet access latency for an estimated processing time. (Xanthos col 3, ll 40-52: performance management system) Xanthos does not explicitly disclose whereby further comprises adjusting the Internet access latency for an estimated processing time. However, Zappala discloses wherein further comprises adjusting the Internet access latency for an estimated processing time. (Zappala para 018, ll 1-10; performance measurement system; para 025, ll 1-11; para 034, ll 8-15: adjust performance parameters (adjust latency))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for adjusting the Internet access latency for an estimated processing time as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11; para 005, ll 9-12)

Xanthos-Zappala does not explicitly disclose whereby the Internet access latency for an estimated processing time associated with the home agent. However, Dyck discloses wherein further comprises the Internet access latency for an estimated processing time associated with the home agent. (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent)

It would have been obvious to one of ordinary skill in the art to modify Xanthos-

Zappala whereby the Internet access latency for an estimated processing time associated with the home agent as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 36, Xanthos discloses a system in accordance with claim 26, wherein the first device is a remote unit and the second device is a remote unit (mobility agent). (Xanthos col 3, ll 60-63: multiple remote units; col 4, ll 3-6: message communications between remote units) Xanthos does not explicitly disclose whereby a home agent. However, disclose wherein a home agent. (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent, mobile unit (mobility agent) communications)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby a home agent as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 38, Xanthos discloses a system in accordance with claim 26, wherein the step of transmitting is performed. (Xanthos col 4, ll 3-6: transmission of request/response message) Xanthos does not explicitly disclose whereby the expiration of a timer. However, Dyck discloses wherein the expiration of a timer. (Dyck

para 013, ll 9-14; para 016, ll 8-12: expiration timer)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby transmission upon expiration of a timer as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 39, Xanthos discloses a system in accordance with claim 38, wherein the timer is provided by the communications specification. (Xanthos col 4, ll 3-6: transmission of request/response message) Xanthos does not explicitly disclose whereby the timer is provided by the communications specification. However, Dyck discloses wherein the timer is provided by the communications specification. (Dyck para 013, ll 9-14; para 016, ll 8-12: expiration time part of registration process (communications specification))

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby timer is provided by the communications specification as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 44, Xanthos discloses a system in accordance with claim 43, wherein the communications specification provides for a data, the packet data serving node

further adapted for adding a wireless access latency parameter to the data and recording the wireless access latency in the wireless access latency parameter. (Xanthos col 4, ll 3-8: determination of latency; col 4, ll 48-53: storage of latency information) Xanthos does not explicitly disclose whereby the data record. However, Zappala discloses wherein the data record. (Zappala para 018, ll 1-10: performance management system; para 032, ll 1-4; para 033, ll 7-10; paragraph 0037, ll 2-6: performance parameters stored within call data records (data records))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for the storage of performance information in data records as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11; para 005, ll 9-12)

Regarding Claim 46, Xanthos discloses a system in accordance with claim 45, wherein the packet data serving node. (Xanthos col 3, ll 40-52: performance management system; col 4, ll 25-31: packet data node)

Xanthos does not explicitly disclose whereby adjusting the Internet access latency for a processing time associated with the home agent. However, Zappala discloses whereby adjusting the Internet access latency for a processing time. (Zappala para 018, ll 1-10; performance measurement system; para 025, ll 1-11; para 034, ll 8-15: adjust

performance parameters (adjust latency))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for adjusting the Internet access latency for a processing time as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11; para 005, ll 9-12)

Xanthos-Zappala does not explicitly disclose whereby the Internet access latency for a processing time associated with the home agent. However, Dyck discloses wherein further adapted for the Internet access latency for a processing time associated with the home agent. (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent)

It would have been obvious to one of ordinary skill in the art to modify Xanthos whereby the internet access latency for a processing time associated with the home agent as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 47, Xanthos discloses a system in accordance with claim 45, wherein the packet data serving node. (Xanthos col 3, ll 40-52: performance management system; col 4, ll 25-31: packet data node)

Xanthos does not explicitly disclose whereby adjusting the Internet access latency for an estimated processing time. However, Zappala disclose wherein adjusting the Internet access latency for an estimated processing time. (Zappala para 018, ll 1-10; performance measurement system; para 025, ll 1-11; para 034, ll 8-15: adjust performance parameters (adjust latency))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for adjusting the Internet access latency for an estimated processing time as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11; para 005, ll 9-12)

Xanthos-Zappala does not explicitly disclose whereby the Internet access latency for an estimated processing time associated with the home agent. However, Dyck disclose wherein the Internet access latency for an estimated processing time associated with the home agent. (Dyck para 023, ll 1-11; para 046, ll 1-5: home agent)

It would have been obvious to one of ordinary skill in the art to modify Xanthos-Zappala whereby the Internet access latency for an estimated processing time associated with the home agent as taught by Dyck. One of ordinary skill in the art would have been motivated to employ the teachings of Dyck in order to enable the capability to enhance mobile communications, minimize network loads, and optimize network traffic. (Dyck para 012, ll 1-7)

Regarding Claim 49, Xanthos discloses a system in accordance with claim 48, wherein the communications specification provides for a data, the packet data serving node further adapted for adding an Internet access latency parameter to the data and recording the internet access latency in the Internet access latency parameter. (Xanthos col 4, ll 3-8; col 4, ll 48-53: storing (recording) latency information) Xanthos does not explicitly disclose whereby the data record. However, Zappala discloses wherein the data record. (Zappala para 018, ll 1-10: performance management system; para 032, ll 1-4; para 033, ll 7-10; paragraph 0037, ll 2-6: performance parameters stored within call data records (data records))

It would have been obvious to one of ordinary skill in the art to modify Xanthos for the storage of performance information in data records as taught by Zappala. One of ordinary skill in the art would have been motivated to employ the teachings of in order to enable the capability to quickly determine adjustments, and solving not easily seen problems or geographically limited problems. (Zappala para 004, ll 4-11; para 005, ll 9-12)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KYUNG H. SHIN whose telephone number is (571) 272-3920. The examiner can normally be reached on 9:30 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. FLYNN can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kyung Hye Shin
Examiner
Art Unit 2143

KHS
June 25, 2008
/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2154